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CAP NorCal Group 5
5999 Freeport Blvd.
Sacramento, CA. 95822
Web site: <http://gp5.cawg.cap.gov>

NorCal Group 5

Chaplain's Corner

George Dawson, Group 5 Chaplain

Two weeks ago, on the 11th of October, there were various gatherings and moments of silence in remembrance of the terrible acts of terrorism that shocked our nation on September 11, 2001. By remembering the events of that day, we were reminded that we never know what a day will bring into our lives. By October 11, however, it seemed as though people were beginning to adjust and get on with their lives. But I wonder, can we really do that (just get on with our lives, that is) or have we been forever changed?

It is natural now, in these intensely troubled times to seek comfort and strength from our support networks, such as family, friends, and churches.

Uncertainty can be just as hard to deal with as an actual event. I was talking recently with a young man who is in the Army National Guard. His unit, like others, has been placed on alert. They know they will go "some where, some time" but the uncertainty and waiting is difficult. I tried my best to encourage him and assured him of my continuing prayer support for him and all our military personnel.

It is natural now, in these intensely troubled times to seek comfort and strength from our support networks, such as family, friends, and

churches. As a pastor I find myself searching for answers to some tough questions, some times there is an answer, some times there is



just the sense that God is saying, "Just trust me, I'll get you through this." I find too that there is comfort, encouragement, and strength in the many promises found in the Bible.

Here are some promises for God's help in daily living.

When troubled by doubts: "God is our refuge and strength, a very present help in trouble" (Psalm 46:1). "My flesh and my heart may fail, but God is the strength of my heart and my portion forever" (Psalm 73:26).

When you are discouraged: "The Lord is near to the brokenhearted, and saves those who are crushed in spirit" (Psalm 34:18). "Be of good courage, and he shall strengthen your heart, all ye that hope in the Lord" (Psalm 31:24).

When you are anxious: "Be anxious for nothing, but in everything by prayer and supplication with thanksgiving, let your requests be known to God. And

the peace of God, which surpasses all comprehension, shall guard your hearts and your minds in Christ Jesus" (Philippians 4:6-7).

And finally, **for peace of soul**: "For I am persuaded, that neither death, nor life, nor angels, nor principalities, nor powers, nor things present, nor things to come, nor height, nor depth, nor any other creature, shall be able to separate us from the love of God, which is in Christ Jesus our Lord" (Romans 8:38-39).

Yes, these are difficult and troublesome times, but God is ever faithful to comfort and encourage and strengthen us in all situations of life. A simple prayer inviting Jesus the Son of God into your life, believing that his death on the cross so long ago paid the price for all our sins, is sufficient for anyone to

experience the grace of God, and have peace in your soul.

From the Flight Deck

2Lt. Jeff Huber, Aircraft Manager

N5524H Down for Cylinder Overhaul

On October 10th, N5524H has gone in to have the cylinders removed and remanufactured after it was revealed on the most recent 100hr inspection, that the compressions in all 6 cylinders had deteriorated further. It became time to get this done and it was decided to do this in conjunction with the Annual due this month as well. Expect the aircraft down 3 to 4 weeks.

We are also making some other

notable changes and repairs:

*Fuel filler caps to be replaced with factory caps. The fancy ones have lived their last refueling.

*Directional Gyro will be remanufactured. Notable precession has been occurring.

*High Capacity Oil Cooler will be installed to replace the smaller one that is currently installed.

*Glider Tow Kit to be installed for use with the Cadet Glider Program for 2002

*New engine EGT gauge to be installed

For further questions regarding the maintenance of N5524H, feel free to contact me to discuss these or any other issues that may need attention.

Contribute to the NorCal Group 5 Newsletter

With the release of our second newsletter, we at Group 5 would like to remind you that we are interested in receiving articles from you on topics that you feel will be of interest to all Group 5 members.

You may submit articles and pictures (if available) either electronically or by regular mail. Electronic formats for articles should be in Microsoft Word format, or compatible. Electronic photo submissions should be sent in JPG format. Send electronic submissions to Steve Taylor, Group 5 Public Affairs Officer at SJTEntrprs@aol.com.

If by regular mail, send photos in a protected envelope and provide your name and address. Photos will be returned after they're scanned. Mail documents to Steve Taylor, Public Affairs Office, at the Group 5 Headquarters address.



Check List, Check List, Use Your Check List!

We as Pilots, have a responsibility. The responsibility comes in the form of reading and following the checklist provided in **ALL** makes, models and types of aircraft we fly.

Utilize CRM (Cockpit Resource Management). A Second in Command is a great assignment for the person sitting next to you in the right seat.

This does not stop with CAP aircraft. We owe it to ourselves, and our passengers, to be familiar with the procedures for normal flight conditions, as well for as any emergencies that may come up. Utilize CRM (Cockpit Resource Management). A Second in Command is a great assignment for the person sitting next to you in the right seat. Request their participation in reading the checklist

in all phases of your flight and reduce your load. You can really get down to the business of flight management with this kind of assistance.

Last point on the checklist. It is equally important to read the "After Landing" list. With an aircraft such as a C182, there are several things that must be done. Cowl Flaps need to be opened to allow proper airflow and cooling over those HOT cylinders. This gets over looked frequently. Check Landing and Taxi lights. These have been, and are being replaced excessively. Check transponder.

Entering and Departing Traffic Patterns, See and Be Seen

In most CAP aircraft, a pulse light system has been installed. These provide excellent visibility to other traffic as you enter or depart a traffic pattern during daylight or evening operations. Use them as opposed to landing lights. A pulsating light provides more visibility than that of a solid burning light. It is also easier on the budget. Remember, do not rely solely on traffic controllers for collision avoidance. Use your "Be Seen" equipment. Remember to check them in your cruise checklist and deactivate them.

Use of WMU Aircraft Schedule

Upon the return of N5524H, we will begin using, and requiring, all pilots to use the WMU "Aircraft Schedule" to block out their time. Each pilot will then be able to determine availability, dates and times that the aircraft can be used. All that will be needed is a phone call to any FRO for a release and your ready to go. If you have any questions on this procedure, please let me know. The WMU can be accessed directly through the Group 5 web site under "Resources".

Common Sense Leaning Guidelines

Part 1 in a series

2Lt. Jeff Huber, Aircraft Manager

When it comes to leaning an engine, everybody's got an opinion. And everybody comes at the subject from a different vantage point. So much information has been propagated over the years on the subjects of peak EGT, best economy EGT, best power, finding the "leanest cylinder" etc., I thought I would include a review of the research that I have done recently. I hope you find this beneficial, and practice some of these ideas.

The first thing to realize is that metal will melt at high temperature...

I recently read an article in FLYING magazine, where a mechanic had commented in the course of a top overhaul, "See here? The owner bought one of those fancy 'exhaust analyzers,' then went out and burned up his engine".

The first thing to realize is that metal will melt at high temperature, and the last time I checked, our entire engine and exhaust system is made of metal. Metals have an interesting property of becoming plastic well before they melt at high temperatures. This property is called "creep." For high carbon steel, creep begins at around 1200 – 1300 degrees. For Nimonic Alloy engines, which is what most Continental engines are made out of, the "creep" begins at about 1380 degrees.

A second major limitation on leaning is detonation. Detonation margins vary significantly from engine to engine. In general, **avoid** leaning to

peak EGT at power setting higher than 65%.

With this in mind, here is a Best Power Mixture guideline for us to consider.

Best-Power Mixture

Best-power mixture comes at 125 degrees on the rich side of peak EGT. This is a very conservative leaning set point, from an engine-protection standpoint. Not only because it is cool enough (compared to peak EGT) to keep exhaust-valve thermal erosion and creep to a minimum, but because there is enough extra fuel in the mixture to allow significant extra cylinder and valve cooling. Best-power leaning also offers the attractive bonus of providing maximum aircraft performance: airspeed is maximum, cooling inflow through the cowl is maximum, rate-of-climb (should it be needed) is maximum. And, time getting to one's destination will be minimum compared to any other mixture setting (for a given manifold pressure and rpm). Overall, because of the extra cooling afforded by the added fuel flow, TBO prospects are probably better for best- power mixture than for any other set point

Bear in mind that best-power mixture results in an overall increase in engine power of 5% or more, compared to full-rich mixture. At very high altitudes (above 5000 ft.), power gain can be much more than 5% when leaning to best power. Leaning of these engines is not recommended below 5000 ft. I recommend that before your departure, make a note to yourself of what setting you want for a given percent of power requirement that you will want during your flight. So before leaning, set your throttle and prop controls to give a "percent

power" figure a few percent shy of your desired final power. Then lean to best power mixture. Otherwise, if you start full rich, and set up 75% power on the MP and tach, it is possible that you will end up at 80% power, or more, after leaning without knowing it.

This is what I believe to be the best method for our aircraft, to insure adequate cooling and performance. Check out next month's issue. We will discuss Peak EGT as part 2 of this series.

Fly Safely!

Group 5 Staff

Maj. Dennis Parham
Commander

Capt. David Strannard
Deputy Commander

Maj. Kathryn Mark
Administration

Maj. George Dawson
Chaplain

2Lt. Curtis Hensley
Logistics Officer

2Lt. Jeff Huber
Aircraft Maintenance Officer

1Lt. Bill Slavensky
Asst. Aircraft Maintenance Officer

2Lt. Mark Naber
Management Information Officer

SM Steve Taylor
Public Affairs Officer

History Channel to Air CAP Story

SM Steve Taylor, Public Affairs Officer

On Monday, November 22, The History Channel will air a special segment on the contributions of the Civil Air Patrol Coastal Patrol during World War II. The segment will air during the History Channel's "This Week in History" program and will be repeated throughout the week.

The 8-10 minute segment will air just days before the Civil Air Patrol marks its 60th anniversary on December 1, 2001.

The segment will conclude with an underwater survey of the shattered wreck of a U-boat off the New Jersey coast.

Coming Events

November 2-4

Wing Commanders Call

Forward items you would like brought to attention of Wing by October 22.

November 10

Squadron Commanders Call

*Group 5 Headquarters
Sacramento, California*

*Mandatory meeting for all
Squadron Commanders.*

November 26

CAP profiled on History Channel

During the show "This Week in History"

December 1

CAP 60th Anniversary Event

Location TBA

CAP NorCal Group 5
5999 Freeport Blvd.
Sacramento, CA. 95822

PLACE
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ADDRESS CORRECTION REQUESTED

To:



